



Valley
POWER SYSTEMS, INC.

AUTHORIZED DISTRIBUTOR
ELECTRO MOTIVE

NEW 144-AUTO FERRIES PROJECT
4420 14TH AVENUE NW – SEATTLE, WA 98107 Tel. 206-834-2329 Fax. 206-782-5455

4-DOC-006 Rev. -
(Formerly Calculation P-0291-06)

Contract 00-6679

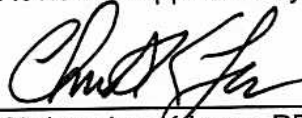
ENGINEERING DATA

REDUCTION GEAR
ELECTRICAL REQUIREMENTS

Submitted by: The Falk Corporation

Date: March 30, 2006

Reviewed/Approved by:


Christopher Lane, PE

3/30/06
Date

October 11, 2005

PROPULSION SYSTEM CONTRACT No. 00-6679

REDUCTION GEAR DATA SHEET

REDUCTION GEAR ELECTRICAL REQUIREMENTS

Electrical requirements for the Falk 44 x 14 DMH2-S Main Reduction Gear are outlined in the following table.

COMPONENT	DESCRIPTION	REQUIREMENTS PER RED GEAR	REQUIREMENTS PER SHIPSET
Electric Motor for Auxiliary Lube Oil Pump	Motor 15 HP, 254TC C-Face, TEFC	18.8 Full Load Amps at 460 VAC - 3 Phase	37.2 Full Load Amps at 460 VAC - 3 Phase
Valve V1-A Main Clutch Engage	D05 Control Valve	2.17 Amps at 24 VDC for momentary engagement	4.34 Amps at 24 VDC for momentary engagement
Valve V1-B Main Clutch Disengage	D05 Control Valve	2.17 Amps at 24 VDC for momentary disengagement	4.34 Amps at 24 VDC for momentary disengagement
Valve V2-A Engine Clutch Engage	D05 Control Valve	2.17 Amps at 24 VDC for momentary engagement	4.34 Amps at 24 VDC for momentary engagement
Valve V2-B Engine Clutch Disengage	D05 Control Valve	2.17 Amps at 24 VDC for momentary disengagement	4.34 Amps at 24 VDC for momentary disengagement
Valve V3-A PTO Shaft Clutch Engage	D05 Control Valve	2.17 Amps at 24 VDC for momentary engagement	4.34 Amps at 24 VDC for momentary engagement
Valve V3-B PTO Shaft Clutch Disengage	D05 Control Valve	2.17 Amps at 24 VDC for momentary disengagement	4.34 Amps at 24 VDC for momentary disengagement

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